

National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Program

EPA Region 10's Designation Criteria for Small Municipal Separate Storm Sewer Systems

2nd Draft - June 2002

This draft document outlines both the criteria and the process that the U.S. Environmental Protection Agency (EPA) Region 10 plans to use to designate Municipal Separate Storm Sewer Systems (MS4s) for inclusion in the National Pollutant Discharge Elimination System (NPDES) storm water permitting program. These criteria apply to small MS4s that are located outside of U.S. Census Bureau-defined Urbanized Areas (UAs).

EPA Region 10 is the NPDES permitting authority for: 1) the states of Idaho and Alaska; 2) Indian Country lands within the states of Oregon, Washington, Idaho and Alaska; and 3) for federal facilities in the State of Washington. These designation criteria will be used to evaluate candidate MS4s in these areas.

A glossary of terms is included at the end of this document.

Introduction

EPA published the NPDES Storm Water "Phase II" Final Rule on December 8, 1999 (64 FR 68722). One component of this rule applies to operators of small MS4s with discharges entering surface waters of the United States.

There are three ways by which a small MS4 may be designated as a "regulated small MS4" that requires permit coverage:

- * small MS4s located within the boundaries of a Census Bureau-defined UA (based on the latest decennial census) are automatically designated;
- * small MS4s that are located outside of UAs serving jurisdictions with a population of at least 10,000 and a population density of at least 1,000 people per square mile and which meet certain designation criteria, are to be designated by the permitting authority;
- * small MS4s outside of UA that contribute substantially to pollutant loadings of a physically interconnected MS4 regulated by the NPDES storm water program are to be designated.

This document outlines the designation criteria and process EPA Region 10 proposes to use in determining whether specific small MS4s will be designated as "regulated small MS4s." EPA

Region 10 may also use this criteria to designate MS4s, if necessary, within the NPDES-delegated states of Oregon and Washington in the event that the state agency fails to make their own designation(s) as required under 40 CFR 123.35(b).

A. Designation Criteria

EPA Region 10 must consider whether storm water discharges from a small MS4 results, or potentially results, in exceedances of water quality standards, including impairment of designated uses, and/or adverse habitat or biological impacts.

EPA Region 10 proposes to use the following seven criteria, in the form of questions, as the basis for evaluating those MS4s which are not automatically designated but are located within EPA's jurisdiction and have a Year 2000 Census population greater than 10,000 people, and a density of more than 1,000 people per square mile. These criteria are based on recommendations made by EPA in the Phase II rule proposal¹, and are intended to evaluate the potential or actual water quality impacts from storm water discharges originating within highly populated areas.

1) Does the MS4 discharge storm water to sensitive waters?

"Sensitive waters" generally include public drinking water intakes and their designated protection areas; swimming beaches and waters in which swimming occurs; shellfish beds; state-designated Outstanding Resource Waters; National Marine Sanctuaries; waters within Federal, State and local parks; and waters containing threatened or endangered species and their habitat. Discharges of storm water to sole-source aquifers will be considered by EPA Region 10 on a case-by-case basis.

2) Is the MS4 a significant contributor of pollutants to waters of the United States?

Municipal storm water discharges specifically identified as "contributing source(s) of pollutants" to a Clean Water Act section 303(d)-listed waterway may be considered as a significant contributor of pollutants to waters of the United States for purposes of designation decisions, unless an EPA-approved Total Maximum Daily Load (TMDL) analysis has determined otherwise. A municipal storm water discharge that is specifically named and required to reduce loading through an EPA-approved TMDL analysis shall be considered a significant contributor of pollutants to waters of the United States.

3) Is the MS4 densely populated?

Population density is related to the level of human activity, and has been shown to be directly linked to total impervious land surfaces; impervious surfaces are directly related to pollutant loadings from storm water runoff.

4) Has the MS4 experienced high population growth over the last 10 years?

High population growth or growth potential means the local residential population has

¹ See 63 FR 1562, January 9, 1998

grown by a rate of 10% or more within a 10 year period, based upon the latest Census Bureau information.

5) Is the MS4 contiguously located to an Urbanized Area?

Jurisdictions that are directly adjacent to a U.S. Census Bureau-defined Urbanized Area will be considered to have potential impacts on a neighboring regulated municipality.

6) Is the MS4 physically interconnected to another MS4?

As required by 40 CFR 123.35 (b)(4), an MS4 located outside a UA that contributes substantially to the pollutant loadings of a physically interconnected MS4 already regulated under Phase II must be included in the program. To be "physically interconnected," the MS4, including roads with drainage systems and municipal streets, of one entity is physically connected directly to a municipal separate storm sewer of another entity.

7) Is the storm water runoff from this MS4 effectively addressed by other water quality programs?

EPA will consider, on a case-by-case basis, whether the storm water runoff from a potentially designated MS4 is effectively addressed under other regulations or programs, such as the Coastal Zone Act Reauthorization Amendments, the National Estuary Program under Clean Water Act section 320, and/or other non-point source programs. Information in support of this criterion should be provided directly to EPA Region 10 by the candidate MS4.

B. Designation Process

EPA Region 10 is required to evaluate all small MS4s meeting the 10,000 population and 1,000 people per square mile density threshold, and to designate those that meet the criteria as needing NPDES storm water permit coverage by December 9, 2002. Designation of small MS4s which are physically interconnected to another regulated small MS4 can occur at any time, as no deadline is specifically referenced in the federal regulations. In addition, final determinations on public petitions for designation received by EPA Region 10 under 40 CFR Section 122.26(f) must be made by the Agency within 180 days from the receipt of the petition.²

The U.S. Census Bureau published in the *Federal Register* its list of Urbanized Areas on May 1, 2002 (67 FR 21962). In early June 2002, EPA Region 10 revised Appendix A of this document to list those urbanized areas (and the cities contained therein) located in Idaho and Alaska as indicated by the Census Bureau. EPA has also created Appendix B to list those geographic areas meeting the threshold of population of at least 10,000 and a population density of at least 1,000 people per square mile based on Year 2000 population statistics. *EPA Region 10 will add information to both appendices as it pertains to MS4s in EPA's jurisdiction for the areas of Washington and Oregon, as necessary, in the near future.*

EPA intends to work closely with all candidate MS4s to answer designation criteria questions, and

² 40 CFR Section 123.35(b) and (c)

will consider all reasonably available information for a particular candidate MS4 prior to making a final designation decision. Sources of information include, but are not limited to: U.S. Census Bureau statistics; state published Clean Water Act section 303(d) lists; EPA-approved TMDL analyses; endangered/threatened species listings as published by the National Marine Fisheries Service and/or U.S. Fish and Wildlife Service; other supplementary information as provided by the candidate MS4; and/or other sources.

In general, water quality considerations and overall impacts of storm water discharges will be given more “weight” than population characteristics in this decision-making process. At this time, EPA Region 10 has not determined to use a point-based system for determining a candidate's designation, but has not yet ruled out the use of such a system.

EPA Region 10 intends to notify all designated MS4s and candidate MS4s, by letter, to confirm their Phase II designation status no later than December 9, 2002.

Any questions related to this designation criteria or process should be directed to EPA Region 10 at the following address: EPA Region 10 Office of Water, Attn: Misha Vakoc, 1200 6th Avenue, (OW-130), Seattle, WA 98101; (206) 553-6650; email: vakoc.misha@epa.gov

Glossary

Note: This glossary is provided for informational purposes only; legal definitions of these terms can be found in the Code of Federal Regulations at 40 CFR Section 122.26(b) or in the Phase II Final Rule, published December 8, 1999 (64 FR 68722).

Municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges to waters of the United States;
- (ii) Designed or used for collecting or conveying storm water;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR Section 122.2.

Physically interconnected means that one MS4 is connected to a second MS4 in such a way that it allows for direct discharges to the second system.

Regulated small MS4 means an MS4 which is automatically designated for inclusion in the Phase II storm water permitting program by its location within an urbanized area, or by designation by the NPDES permitting authority.

Small municipal separate storm sewer system means all separate storm sewers that are:

(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the Clean Water Act that discharges to waters of the United States.

(ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 CFR Sections 122.26 (b)(4) and (b)(7).

(iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
[40 CFR 122.26(b)(16)]

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Urbanized Area: For Census 2000, the Census Bureau classifies "urban" as all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of: core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. In addition, under certain conditions, less densely settled territory may be part of each UA or UC. **Note: The Census Bureau announced the Census 2000 Urban Areas on May 1, 2002. More information can be found at the U.S. Census Bureau website at http://www.census.gov/geo/www/ua/ua_2k.html.**

DRAFT
APPENDIX A

As required by regulations found at 40 CFR 122.32, all small municipal separate storm sewer systems (MS4s) operated by federal, state, tribal, local or other public entity within the boundary of the following Urban Areas [defined by the Census Bureau on May 1, 2002 (67 *FR* 21962)] are automatically designated as “regulated small MS4s” and are required to seek coverage under a NPDES permit issued by EPA Region 10 for storm water discharges. EPA may waive the requirements otherwise applicable to the regulated small MS4 if the waiver criteria outlined in 40 CFR 122.32(d) or (e) are met. If the small MS4 is not located entirely within an Urban Area, only the portion that is within the urbanized area is regulated.

Urban Areas located within the State of Idaho

Boise, ID

(includes Boise City, Eagle, Meridian, Garden City and portions of Ada County)

Coeur d'Alene, ID

(includes Coeur d'Alene, Dalton Gardens, Hayden, Hayden Lake, Post Falls, Fernan Lake Village, and portions of Kootenai County)

Idaho Falls, ID

(includes Idaho Falls, Ammon, Iona, and portions of Bonneville County)

Lewiston, ID - Clarkston, WA

Nampa, ID

(includes Nampa, Caldwell, Middleton and portions of Canyon County)

Pocatello, ID

(includes Pocatello, Chubbuck and portions of Bannock County)

Urban Areas Located within the State of Alaska

Anchorage, AK

Fairbanks, AK

DRAFT - Appendix B

The following Census-designated places have a population of at least 10,000 and a population density of at least 1,000 people per square mile, according to the Census 2000. Operators of small MS4s located in the following areas listed below will be evaluated using the criteria described in this document to determine whether those MS4s should be designated as regulated small MS4s.

Note: Year 2000 Population and Population density information is included as provided by the Census Bureau at the following internet sites:

Idaho - <http://www.census.gov/census2000/states/id.html>, <http://www.idoc.state.id.us/data/dtacntr.html>

Alaska - <http://www.census.gov/census2000/states/ak.html>

Entries addressing criteria characteristics in this draft appendix are provided for informational purposes only and may be incomplete and are subject to revision. Blank entries indicate information that has not yet been gathered by the EPA Region 10 Storm Water Program. Operators of MS4s in these candidate areas listed here are encouraged to contact Misha Vakoc, EPA Region 10 Storm water Program Coordinator, directly at (206) 553-6650 or by e-mail at vakoc.misha@epa.gov, with any questions about the information contained in this Appendix.

Census Designated Place	Receiving Water: Does the MS4 discharge storm water to "sensitive waters"?	Significant contributor of pollutants to waters of the U.S.?	Population & Density (Pop./mi ²)	High Pop. growth% % change, 1990-2000	Contiguous to an Urbanized Area?	Physically interconnected to another MS4?	Storm water from this MS4 addressed by other water quality programs?	
Blackfoot	Snake River, ESA-listed aquatic species	This portion of Snake River is 303(d)- listed for nutrients, sediment, dissolved oxygen, flow alteration & pathogens	10,419 1,926/sq. mile	8.0%				
Moscow	Paradise Creek	This portion of Paradise Creek is 303(d) listed for ammonia, nutrients, sediment, pathogens, flow alterations, habitat modification and temperature.	21,291 3,460/sq mile					
Mountain Home			11,143 2,150/sq mile	40.8%				
Rexburg	South Fork Teton River		17,257 3,534/sq mile	20.7%				
Twin Falls	Snake River; ESA listed aquatic species		34,469 2,870/sq mile	24.7%				